

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029495**Date Inspected:** 22-Apr-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG/Tower**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA observed the following welders working on the OBG and the Tower at the following locations:

This QA Inspector randomly observed QC perform Magnetic Particle (MT) testing and Hardness Testing in accordance with RFI-003248R01 on the connection plates (lugs) that are attached to each of the Tower shafts of the Tower head for the attachment of the hand-ropes at the 160m elevation of the Tower. A total of four (4) readings were performed on lug's #2 (south main span), 3 (south side span) and 4 (north side span) and recorded. This QA Inspector noted that no rejectable indications were found at the time of MT testing.

This QA Inspector performed 100% Magnetic Particle (MT) testing along the length of, just above, and along the weld of the connection plates 2, 3 and 4 listed above. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector verified MT testing and inspection by QC on the Traveler Rail Bracket at 13W PP118 (SA7501A) on the exterior of the OBG in accordance with RFI-003190R00. This QA Inspector noted that no

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rejectable indications were found at the time of testing. This QA Inspector performed 100% MT testing on the Traveler Rail Bracket (SA7501A). This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications. The RFI states that new welds shall receive 25% UT per special provisions, Section 10-1.59. Due to the geometric dimensions of the part in relation to access of testing by UT, a representative test could not be performed.

This QA Inspector randomly observed ABF welders Wai Kit Lai #2953 perform the Shielded Metal Arc Welding (SMAW) process on the Dehumidification access door hinges located at 14W PP127 W3. The welder was observed utilizing WPS ABF-D1.5-F1200A for SMAW. The welder was observed preheating the area to be welded prior to welding. Other welding parameters as inspected by the QC Inspector were recorded as 136 amperes and appeared to be in compliance with the WPS noted above. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

FW Spencer welder Rick Kiikvee #5319 was observed performing SMAW welding on 2.5" domestic water and 4" compressed air outlets to schedule 40 pipe. The welder was observed utilizing WPS-1-12-1. This QA Inspector observed the welder preheat the area to be welded prior to welding. Other welding parameters as inspected by the QC Inspector appeared to be in compliance with the WPS noted above. This QA Inspector made random observations throughout the shift and noted that the work was in process and appeared to be in general conformance with the contract documents. Completed work on this date includes; 1/DW1/8/NW, 5/2.5/9/NW, 4/2.5/8/NW, 2/4/8/NW, 1/2.5/8/NW, 13/2.5/1W2/NW, 2/2.5/8/NW and 5/4/9/NW.

Summary of Conversations:

Conversations on this date were relevant to work performed.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

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Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
